

Habitat and distribution of the Rock-loving *Cisticola Cisticola aberrans* in Serengeti National Park, Tanzania

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The Rock-loving *Cisticola Cisticola aberrans* has a wide range in Africa (Hall & Moreau 1970). It has specialized habitat requirements and consequently is local within much of its known range (Britton 1980, Mackworth-Praed & Grant 1960). Schmidl (1982) traced only 2 published records of the species in Serengeti National Park (SNP), Tanzania, but between 1985 and 1987 I found it to be quite common in its preferred habitat there. This paper describes its status and aspects of its habitat preferences in SNP. Descriptions of the natural features of SNP have been reviewed by Sinclair & Norton-Griffiths (1979).

All parts of SNP were visited. Observations were made opportunistically and no formal survey was undertaken. *C. aberrans* was easily located and identified by its call. Most individuals could be approached closely enough to be identified by plumage characters, but the combination of call and habitat was usually sufficient. SNP is within the range of *C. a. emini* as shown by Hall & Moreau (1970).

Mackworth-Praed & Grant (1960) and Britton (1980) emphasize the scantiness of vegetation in the rocky habitat of *C. aberrans* in East Africa. On the contrary, observations in SNP indicate that the species is confined to rocky places where the vegetation usually is rather plentiful. Most records were from rocky hills, but in northwestern SNP and near Seronera it was found among kopjes. The kopjes referred to in this paper are also known as boulder inselbergs, or tors, as defined by Gerrard (1988), though some include features resembling domed inselbergs and castle kopjes. *C. aberrans* was also noted in extensive thickets of *Croton dichogamus* and *Acacia brevispica* on the eastern scarp of the Magogwa Hills after fire had removed grass from the rock outcrops that are its usual habitat in that area.

On hills, *C. aberrans* occupied extremely broken ground, with boulders forming a scree on steep slopes, or rock outcrops and cliffs, more or less overgrown with grass, bushes and small trees. Even very small rock outcrops or cliffs were suitable. It preferred areas where there was grass growing between the boulders. The grass was usually *Loudetia* sp. with the leaf canopy 0.5 m to 0.75 m high, and flowering culms extending to above 1 m in height.

The steep slopes of hills in SNP are more or less covered with woody vegetation. Characteristic species of tree are *Combretum molle*, *Commiphora trothae* and *C. africana*, *Acacia* spp. (particularly *A. gerrardii* and *A. nilotica*), *Dombeya rotundifolia* and *Lonchocarpus eriocalyx*. In many places these form open woodland, particularly on the steepest slopes where the effects of fire and browsing animals have been less severe. Around rock outcrops *Cordia ovalis*, *Ziziphus mucronata*, *Euclea divinorum*, *Grewia* spp. and *Rhus natalensis* form small thickets.

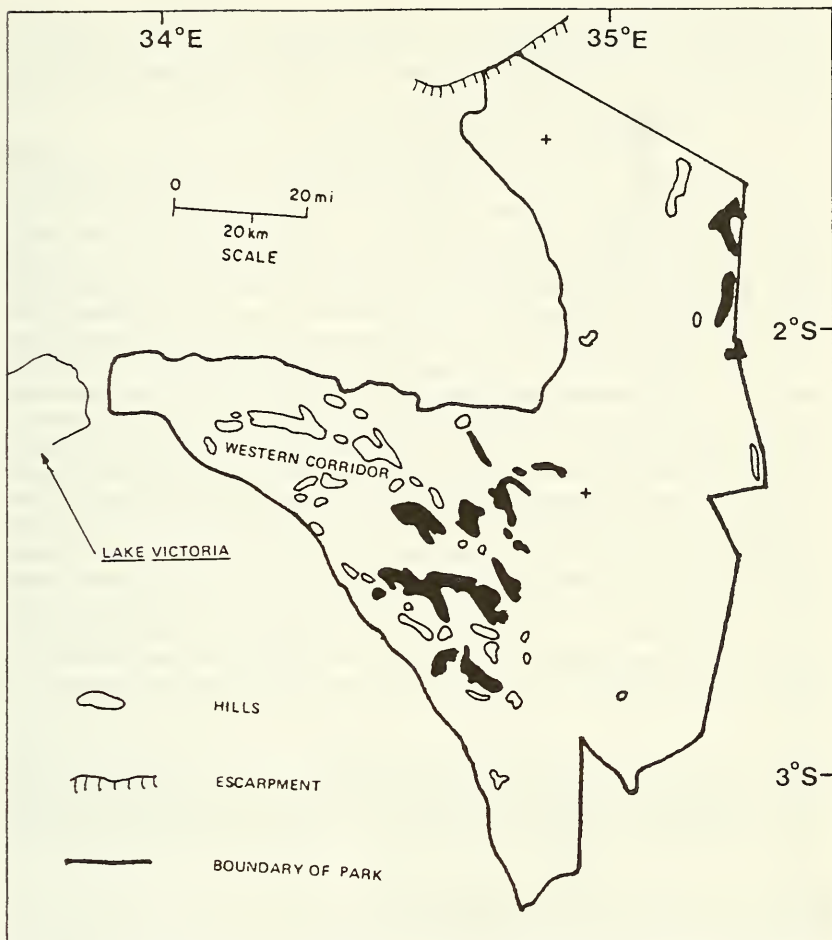


Fig. 1. Map of Serengeti National Park, showing the distribution of hills. Hills on which *C. aberrans* was recorded are shaded black. Kopjes on which *C. aberrans* was recorded are marked +.

Near Seronera *C. aberrans* was found on kopjes with steep screes of large boulders. Tall *Loudetia* grew between the boulders but there were few bushes or trees. In northwestern SNP *C. aberrans* occupied kopjes on ridgetops, with tall *Loudetia* and *Hyperthelia dissoluta* growing thickly between the large boulders at their bases. Large trees of *Ficus* sp., *Combretum molle* and *Terminalia mollis*, and thickets of *Grewia* sp., *Rhus natalensis* and other shrubs were prominent on and around the kopjes.

C. aberrans was observed to use all strata of the vegetation from bare rock surfaces to mature tree canopies. It spent most time in the grass layer and among bushes, particularly *Commiphora trothae*, which was usually

conspicuous in the hills. After fires had burnt most of the herb layer in the dry season, *C. aberrans* moved to small remnants of cover that had escaped burning, usually around rock outcrops or on cliffs. Such remnants are found on most hills in SNP, even after the most severe fires, and were seen to be used as refuges by *C. aberrans*.

C. aberrans' habitat in SNP approximates to that occupied by the species in Zambia (Benson *et al.* 1973) and Malawi (Benson 1944), in contrast to other East African populations (Mackworth-Praed & Grant 1960, Britton 1980), which occupy areas of bare rock with scant vegetation, and for the species in South Africa (McLachlan & Liversidge 1978), where it inhabits rank vegetation along streams.

Fig. 1 shows the localities where *C. aberrans* was located. Most of the hills in southwestern SNP have steep escarpments, often with a line of rock outcrops and cliffs near their summits. On these hills *C. aberrans* was common, its habitat being linear in distribution and in some cases more or less continuous for several kilometres. On other hills, including some in the Western Corridor, there are no steep escarpments and there are fewer outcrops of rock. In these hills small populations of *C. aberrans* may be present but remain unrecorded. On the lower slopes of escarpments, the woodland was occupied by the Rattling Cisticola *C. chiniana*. In the open woodland and scattered tree grassland of the flatter hilltops *C. chiniana* and the Croaking Cisticola *C. natalensis* were characteristic. Some small hills are rocky to their summits and there *C. aberrans* dominated. The Issuria Escarpment, on the northwestern boundary of SNP, was not investigated. The habitat there appears ideal for *C. aberrans* and Finch (1987) recorded the species a short distance along the escarpment in Kenya.

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